REMARKS

The Applicant notes with appreciation the Examiner's courtesy and professionalism during the telephonic interview completed on February 4, 2008. The participants were the undersigned and Examiner Nguyen. No exhibits were shown or demonstrations conducted. The claims discussed were the independent claims of the application (1, 12, 21). The prior art discussed was that cited in the previous Office Action, U.S. 4,761,955 to Bloch, and U.S. 7,017,345 to Von Behrens. Based on the discussions during the interview, it is believed that agreement was reached that the foregoing amendments overcome the rejections of record.

In the prior Action, claims 1-2 and 10-11 were rejected under Section 102(b) over the Bloch patent. The Examiner took the position that Bloch disclosed an SMA actuator comprising a housing 26 and a stop 30, 32. However, it is noted that the broadest claims of the present application now more clearly recite a linear actuator comprising a stop displaceable on a linear axis with respect to a housing. In contrast, Bloch requires two elements, a stop 32 and a post 30 to arrest motion of its actuator (see Figure 1 of Bloch). If only reference numeral 32 is held to be the stop, then it cannot be displaceable with respect to the Bloch housing. If post 30 is included as a portion of the Bloch stop, it must be noted that Bloch expressly requires a circular rotary accumulator 10 to which post 30 is attached. For this reason, displacement of the Bloch stop along a linear axis with respect to a housing is not possible. Therefore, Bloch does not and cannot expressly or inherently teach each limitation of the present claims with the requisite specificity in accordance with the "all-elements" test set forth in *Verdegaal* and *Richardson*.[1] Therefore, the amended independent claims of the present application as amended define over the teachings of the cited art. The claims depending from amended claims 1, 12, and 21 incorporate all of the limitations thereof by reference, and are therefore also believed to patentably define over any teaching of the cited art. Withdrawal of the Section 102 rejection of the claims over Bloch is believed to be merited and is respectfully requested.

Next, the Examiner rejects claims 1-3 and 10-11 under Section 102(b) over the Von

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[1] *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."); *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) ("The identical invention must be shown in as complete a detail as is contained in the ... claim").

Behrens patent. A number of features disclosed by Von Behrens are listed as serving as a "stop," that is, "311, 313, 810, 905, 1445, 1435, etc." However, in each case, to the extent the recited feature can be considered a stop, it still does not meet the limitations of the amended independent claims of the present application.

Looking to reference numerals 311 and 313 of Von Behrens, reference to Figure 4 of that patent shows that the features are attachment points for a spring 325 (see also *Col. 7, line 55*). The features to which attachment points 311, 313 are attached are recited as a drive member 310 having a tailored return force profile adjustment surface 335 (see *Col. 7, ll 37-39*). There is no recitation in the Von Behrens patent of any of these features serving as a stop. Even more, as shown in the drawing figures, attachment points 311, 313 are attached to a drive member 310 having a tailored return force profile adjustment surface 335 having an arcuate top surface. Even if it is accepted that attachment points 311, 313 could serve as a stop, in view of the path of travel of the drive member 310 having a tailored return force profile adjustment surface 335 (see also Figure 3 of Von Behrens, at bottom), attachment points 311, 313 can only move in an arcuate path. Therefore, the limitation of a stop displaceable along a linear axis with respect to a housing is not and cannot be found in Von Behrens. The rejection should be withdrawn.

The same logic applies to the other features suggested as a stop by the Examiner. Reference numeral 810 is recited as a connection point (see *Col. 13, line 10* and also Figure 8), and reference numeral 905 is recited as a resilient coupling element (see *Col. 14, ll 7-45* and also Figure 9A). No recitation of any function as a stop is provided by Von Behrens. Further, with reference to connection point 810, there is no recitation in Von Behrens of any displaceability of the feature, much less in a linear axis with respect to a housing. The feature appears to be a fixed connection point, based on Figure 8.

Looking to resilient coupling element 905, Von Behrens expressly teaches that the feature is a resilient coupler, provided for a protective purpose. That is, with reference to *Col. 14, ll 20-45*, feature 905 comprises a shaft 966, and a resilient member 960 disposed between attachment members 965 and 970. Attachment member 965 is rigidly attached to shaft 966, while member 970 is slideable in relation to shaft 966. Members 965 and 970 are in a fixed spatial relationship until the forces applied thereto exceed a particular predetermined range (*Col. 14, ll 31-35*), at

which point member 970 displaces with respect to shaft 966. Thus, the function of the recited feature is to give, not to stop, and the displaceable stop of the present invention as set forth in the amended claims is not taught. The rejection should be withdrawn.

The characterization of reference numerals 1445, 1435 of Von Behrens is similarly flawed. Those features are disclosed to be tailored force profile adjustment surfaces 1435, 1445, and to have the same function as tailored force profile adjustment surfaces 335, i.e., to apply a variable return force. With reference to Figures 5G and 5H of Von Behrens, and also the discussion at *Col. 10, ll 19-42*, the tailored force profile adjustment surfaces of Von Behrens are designed to provide "... a variable return force throughout the extension and contraction strokes of an SMA component) (see *Col. 10, ll 19-24*). Thus, characterization of the features bearing reference numerals 1435, 1445 as a stop is suspect, in that Von Behrens clearly teaches that those features are designed to alter a return force during expansion/contraction of an SMA component, not to serve as a stop. Even more, with reference to Figures 5G and 5H, those features (1435, 1445) provide an arcuate path of travel, and therefore cannot meet the limitation of a stop displaceable along a linear axis with respect to a housing (presumably reference numeral 302 of Von Behrens. Withdrawal of the rejection is believed to be merited.

Finally, the Examiner rejects claims 4-9 and 12-31 under 35 U.S.C. §103(a) over Von Behrens in view of U.S. 6,762,515 to Gummin. For the reasons set forth above, it is believed that the present amendments and arguments clearly set forth the reasons that Von Behrens, the principal reference relied on, does not teach each feature of the present invention as set forth in the amended independent claims. At the least, none of the Von Behrens features relied on by the Examiner (311, 313, 810, 905, 1445, 1435, etc.) can fairly said to be a stop displaceable on a linear axis with respect to a housing. The teaching of Gummin of multiple SMA actuators in series or in parallel does not cure this lack. Of course, it is a requirement to support a rejection under Section 103 that the combination of prior art cited must teach expressly or inherently each element of the claim under consideration. Therefore, as set forth in the foregoing discussion, amended claims 1, 12, and 21 are believed to be in allowable condition over any combination of Von Behrens and Gummin. The claims depending therefrom are also in condition for allowance

without consideration of obviousness.[2] The rejection should be withdrawn.

All issues raised in the most recent Action are believed to have been satisfactorily addressed by the present paper, and accordingly issuance of a formal Notice of Allowance for all pending claims of the application is respectfully requested. However, if the Examiner has any further questions or concerns, he is asked to call the undersigned to advance prosecution. No fees are believed to be due. However, if any unforeseen fees should be due, the Commissioner is authorized to deduct the fee from, and to credit any overpayments to, Deposit Account No. 11-0978.

Respectfully submitted,

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[2] *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) ("Dependent claims are non-obvious under 35 USC 103 if the claims from which they depend are non-obvious.").